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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/155,231	09/23/1998	SEPPO HAMALAINEN	11902.9USWO	8336

32294 7590 08/03/2005

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EXAMINER

DUONG, DUC T

ART UNIT	PAPER NUMBER
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2663

DATE MAILED: 08/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/155,231	HAMALAINEN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Duc T. Duong	2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 3,4,8,11,14-23,25,27,29-39,41,43 and 45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3,4,8,11,25 and 41 is/are allowed.
- 6) ☒ Claim(s) 14-23,27,29-39,43 and 45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☒ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All   b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 15, 20, 31, and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 15, 20, 31, and 36 appear to be a Markush group; hence, "comprises" as used in the claim constitutes an improper Markush group and it should be changed to -- consists of--. See MPEP 2173.05(h).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 14-23, 27, 29-39, 43, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Behtash in view of Gilhousen et al (US Patent 5,056,109).

Regarding to claims 14, 27, 29, 30, 43, and 45, Behtash discloses a base station 102 having a radio connection with a personal station 104-106 in a digital radio link

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(Fig.1), said base station configured to identify a change (step 204; identifying desired rate and BER) in amount of traffic received from said personal station (Fig. 4 col. 4 lines 28-30); determine (steps 208 and 220-228; negotiating and computing the power to be allocated for the desired rate and BER) a transmission of a power control command based on said change in the amount of traffic (Fig. 4 col. 4 lines 55-67); and transmit (step 218) said power control command  $S_i$  to said personal station in accordance with said determining (Fig. 4 col. 5 lines 44-46).

Behtash fails to teach or determining and transmitting the power control command at a frequency based on said change in the amount of traffic.

However, Gilhousen discloses a communication system for power control, wherein power control commands are determined and sent at a relatively high rate (frequency) in response to signal strength (change in traffic) received from mobile (col. 7 lines 7-22).

Thus, it would have been obvious to a person of ordinary skill in the art to include the power control system as taught by Gilhousen in Behtash's system to permit Rayleigh fading on the inbound link path to be tracked. The motivation to do so would have been so that channel conditions will not change significantly before the mobile unit receives and responds to the signal.

Regarding to claims 19 and 35, Behtash discloses all the limitations with respect to claims 14 and 30, except for the method and apparatus of operating the functions thereof is now being performed by the mobile. However, to arrange a method and apparatus of operation in a base station to in a mobile would have been obvious to a

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person of ordinary skill in the art since such arrangement would be easily implement using the same hardware and software.

Regarding to claims 15, 20, 31, and 36, Behtash discloses identifying a change in the transfer rate (Fig. 4 col. 4 lines 28-30).

Regarding to claims 16, 21, 32, and 37, Behtash discloses the determining a frequency transmission power control command includes negotiating with said personal station to change said frequency of transmission power control command (steps 224-228; Fig. 4 col. 5 lines 33-42).

Regarding to claims 17, 22, 33, and 38, Behtash discloses the determining said frequency of transmission of said power control command includes determining said frequency of transmission based on a change in frequency of received power control commands from said personal station (step 204; Fig. 4 col. 4 lines 28-30).

Regarding to claims 18, 23, 34, and 39, Behtash discloses the identifying includes receiving a request from said personal station to change transmission between said personal station and a base station (step 204; Fig. 4 col. 4 lines 28-30).

***Allowable Subject Matter***

6. Claims 15, 20, 31, and 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 3, 4, 8, 11, 25, and 41 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record above fails to teach or make obvious the step of or

means for **“wherein when the changed data transfer relates to a decreased transmission rate of the first party, the second party will decrease a frequency of power control commands to be sent to the first party and, correspondingly, when the changed data transfer relates to an increased transmission rate, the second party will increase the frequency of power control commands”**, when such frequency of power control is considered within the specific combination of steps recited in the method of claim 3. The prior art of record above fails to teach or make obvious the step of or means for **“wherein the power control command is formed of a plurality of bits and when the changed data transfer relates to a decreased transmission rate of the first party, the second party will shorten a length of the power control command and, correspondingly, when the changed data transfer relates to an increased transmission rate, the second party will extend the length of the power control command”**, when such power control command is considered within the specific combination of steps recited in the method of claim 4. The prior art of record above fails to teach or make obvious the step of or means for **“wherein the power control commands are transmitted at first and second transfer rates, the second transfer rate being lower than the first transfer rate, of which the second transfer rate is used when the transmission of the first party is in a DTX state”**, when such power control command is considered within the specific combination of steps recited in the method of claim 8. The prior art of record above fails to teach or make obvious the step of or means for **“wherein the manner in which the power control commands are to be sent in one direction is changed in reverse**

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**proportion to a load of the opposite transfer direction**", when such power control command is considered within the specific combination of steps recited in the method of claim 11. The prior art of record above fails to teach or make obvious the step of or means for **"identifying an absence of traffic received from said base station"**, when such identifying is considered within the specific combination of steps recited in the method of claim 25 or the device of claim 41.

### ***Conclusion***


8 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc T. Duong whose telephone number is 571-272-3122. The examiner can normally be reached on M-F (9:00 AM-5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Q. Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DD

DD

  
RICKY NGO  
PRIMARY EXAMINER

8/11/05